REMARKS

Applicant respectfully requests that the instant application be reconsidered in light of the above amendments and the following remarks.

Claims 1, 16, and 36 have been amended.

Claims 34, 35, and 37-62 have been withdrawn.

No Claims have been deleted.

No New Claims have been added.

Response to Restriction Requirement Pursuant to 35 U.S.C. §121

In compliance with the Examiner's requirement pursuant to 35 U.S.C. §121, Applicants hereby confirm the provisional election to prosecute Group I, Claims 1-33, with traverse, consistent with the telephone conversation between Examiner and the undersigned attorney on February 28, 2006. Claim 36 has been amended to properly depend from Claim 16. The election of Group I is being made without prejudice to Applicants' rights with respect to Claims 34, 35, or 37-63, including the right to file divisional applications thereon. Accordingly, Claims 34, 35, and 37-63 are hereby withdrawn from further consideration.

Applicants' respectfully submit that the restricted species are within the same field of search, and represent a catalyst composition, and utilization of that catalyst composition. Examination of the claims as filed would expedite prosecution without requiring an unreasonable amount of additional search time. Therefore, examination of the claims as filed does not represent an undue burden. Applicants respectfully request that the Restriction Requirement be withdrawn.

Specification

Examiner has objected to the disclosure for referring to MCM-41 as being described in U.S. 5,098,684. Examiner is not able to find the detailed description of MCM-41 in the cited patent. The term MCM-41 is an acronym for Mobile Crystalline Material number 41, an arbitrary numbering system of the manufacturer of this material.

MCM-41 is a silicate obtained by a templating mechanism. It is ordered to some degree, so that there are arrays of non-intersecting hexagonal channels, identifiable by TEM, XRD, and vapor adsorption. By changing the length of the template molecule, the width of the channels can be controlled to be within 2 to 10 nm. This templating mechanism and the formation of MCM-41, as well as various other MCM compounds, is disclosed in US 5,098,684, even though the term MCM-41 is not explicitly utilized in the patent disclosure. However, the material sold commercially under the name MCM-41, or equivalents thereof, is widely known in the art to be disclosed in US 5,098,684. Removal of the rejection is respectfully requested.

Claim Objections

Claims 1 and 16 have been amended to correct the obvious typographical error, wherein the term "less then" has been corrected to recite "less than", as suggested by Examiner.

Claim Rejections Under 35 USC §102 or §103

Claims 1-33 have been rejected under 35 USC §102 (b) as being anticipated by or, in the alternative, under 35 USC §103 (a) as obvious over U.S. Patent No. 5,057,296 to Beck et al. (hereinafter Beck-296) and U.S. Patent No. 5,200,058 to Beck et al. (hereinafter Beck-058.)

Claims 1 and 16 have been amended to further clarify that the recited catalyst system is a catalyst system for polymerizing olefins i.e., that the catalyst is an olefin polymerization catalyst. Support for these amendments may be found on page 27, line 5 et. Seq., page 33, lines 1-14, and on page 39, lines 16-23 of the application as originally filed. No new matter has been added.

In Claims 1 and 16, Applicants recite a catalyst system comprising an olefin polymerization catalyst and a support comprising a non-layered inorganic porous crystalline phase material, wherein the support comprises a hexagonal arrangement of uniformly-sized pores having an average pore diameter of greater than 13Å and a pore

wall thickness of less than or equal to 25 Å. Applicants' recited olefin polymerization catalyst unexpectedly demonstrates high olefin polymerization activity in combination with a relatively short onset of olefin polymerization time. Applicants theorize that the combination of the uniform pore size, the relatively "thin" pore wall, and the location of the catalyst within the pores of the support, results in an improved catalyst. It is thought the ethylene or the other smaller alpha olefins, diffuses into the rather large pore opening of the support where polymerization takes place. As this polymerization continues, the thin pore walls then fracture to expose more of the active catalyst sites located within the support. The net result of Applicants' recited olefin polymerization catalyst is a highly active polymerization catalyst which has a relatively short, and in fact an almost instantaneous onset of polymerization.

Beck-269 is directed to making a zeolite support. As Applicants disclose, Example 1 of the instant application was prepared using a method "similar to that described" by Beck in Example 41 of US 5,057,296. While this is a true statement, the mere preparation of a material similar to that outlined in a reference, whether or not the product materials are similar, does not provide any teachings or suggestion that a material so prepared is suitable for use as a support in a catalyst system for polymerizing olefins. Furthermore, as Examiner admits, Example 41 fails to disclose the average pore size. Accordingly, the pore wall thickness cannot be determined from the reference.

The Office Action also states that "[i]n general, the larger the d_{100} peak value and the larger adsorption capacity, the larger the pore size and the thinner the pore wall." This statement is an oversimplification of a very complex set of conditions which results in an incorrect statement. While the larger adsorption capacity may result from a larger pore size, the larger pore size does not necessarily translate into a thinner pore wall. Likewise, a thinner pore wall does not necessarily translate into a larger adsorption capacity nor a larger pore size. This is apparent in Applicants' disclosed comparative examples, wherein the Example and the Comparative Examples each demonstrate similar methods of preparation, similar adsorption capacities, and similar pore sizes, yet Example 1 is observed to have a radically different pore wall thickness than Comparative

Examples 1 and 2. Example 1 had an average pore size of 89Å and a repeat distance of 95Å, resulting in a wall thickness of about 6Å. Comparative Example 1 had an average pore size of 95Å and a repeat distance of 127Å, resulting in a pore wall thickness of 32Å. Comparative Example 2 had an average pore size of 62Å and a repeat distance of 106Å, resulting in a pore wall thickness of 44Å. Accordingly, Applicants' recited catalyst system comprising a support having a pore wall thickness of less than 25Å is not inherent in materials produced in a manner similar to that disclosed in the Beck references.

Examiner contends that even if the claimed properties are not inherent in the polymers of the prior art examples, it would still have been obvious to a skilled artisan to arrive at the claimed subject matter because it appears that the claimed subject matter is within the generic disclosure of the prior art and expected to work. Applicants respectfully disagree. Nothing within the four corners of Beck-296 discloses Applicants' combination of an olefin polymerization catalyst and a thin wall support. Applicants' respectfully request the rejection based on Beck-296 be withdrawn.

Beck-058 is directed to catalytic conversion of organic feed stocks by contacting the feed stocks under catalytic conversion conditions with a catalyst comprising an active form of a functionalized inorganic, porous, non-layered crystalline phase having uniformly sized pores of at least about 13 Angstrom units in diameter. Beck-058 discloses numerous catalytic processes, yet similar to Beck-296, Beck-058 fails to disclose an olefin polymerization catalyst, much less an olefin polymerization catalyst having a particular pore wall thickness, much less an olefin polymerization catalyst having a pore wall thickness of less than or equal to about 25 Å.

Beck-058 fails to provide any disclosure or suggestion directed to pore wall thickness. As discussed above, Applicants' Examples demonstrate that similar methods of preparation do not necessarily result in thinner pore walls. As such, the pore wall thickness is not an inherent attribute of the supports in either of the Beck references. Since Beck-058 fails to disclose or suggest pore wall thickness, the reference cannot reasonably be found to suggest or disclose a limitation of pore wall thickness that results in an improved olefin polymerization catalyst. Nothing within the four corners of Beck-

058 discloses Applicants' combination of an olefin polymerization catalyst and a thin wall support. Applicants' respectfully request the rejection based on Beck-058 be withdrawn.

In view of the above remarks, Applicants respectfully request reconsideration of the claims, that the rejection of the claims be removed, and that the claims, as amended, be passed to allowance.

Respectfully submitted,

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